



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,246	11/30/2000	Christopher Joseph Berens	100.142US01	4356

34206 7590 03/04/2005  
FOGG AND ASSOCIATES, LLC  
P.O. BOX 581339  
MINNEAPOLIS, MN 55458-1339

EXAMINER

HA, DAC V

ART UNIT PAPER NUMBER

2634

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. **09/727,246**Applicant(s) **BERENS ET AL.**Examiner **Dac V. Ha**Art Unit **2634**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 13, 14, 21** are rejected under 35 U.S.C. 102(e) as being anticipated by Takla (US 6,044,123).

**Regarding claim 1**, Takla teaches the followings.

“estimating a frequency ... into a transmitted data stream” (Abstract; Col. 1, lines 30-31; Col. 2, lines 16-19; Col. 3, lines 66-67) (where the frequency of the clock embedded in the data signal is predetermined);

“capturing the embedded ... estimated frequency” (Abstract; Col. 1, line 40-44; Col. 4, line 4 to Col. 7, line 42).

**Regarding claim 13**, see claim 1 above. Further, Takla teaches “decoding ... decoded estimate” in Col. 2, line 63 to Col. 3, line 34.

**Regarding claim 14**, see claim 1 above.

**Regarding claim 21**, Takla teaches all the claimed subject matter “a clock control ... receive end” in Figure 2.

Art Unit: 2634

3. **Claim 15** is rejected under 35 U.S.C. 102(e) as being anticipated by Van der Putten et al. (US 6,072,810) (hereafter Van).

**Regarding claim 15**, Van teaches all the claimed subject matter "a transmit end ... data" in Figure 1.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 308, 19, 20, 22-24, 26-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takal.

**Regarding claim 3**, the "data frequency" is predetermined and conveyed to the receiver from the transmitter in known manner. Thus, the presentation of such information is design preference. Therefore, the claimed subject matter "creating ... identifier" would have been optional one skilled in the art.

**Regarding claims 4-8**, these claimed subject matter would have been obviously optional to one skilled in the art for similar reasoning applied to claim 2 above.

**Regarding claim 19**, see claim 1. Further, the claimed subject matter "a protocol interface" would have been obvious to one skilled in the art.

**Regarding claim 20** the claimed subject matter "a serial ... buffer" would have been optional to one skilled in the art.

Art Unit: 2634

**Regarding claims 22-24** these claimed subject matter would have been optional to one skilled in the art.

**Regarding claims 26-28**, see claim 20.

**Regarding claims 29-30**, see claims 16-17.

6. **Claims 16-18, 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van.

**Regarding claims 16-17**, these claimed subject matter would have been obviously obvious to one skilled in the art.

**Regarding claim 18**, see claim 16.

**Regarding claim 25**, see claim 16.

7. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Takla in view of Guo (US 5,400,370).

**Regarding claim 2**, Takla teaches all the claimed subject matter in claim 2, as stated above, except for the claimed subject matter "buffering the incoming data in an input buffer". Guo, in the same field of endeavor, teaches the use of "buffering the incoming data" is known (Figure 12, element 40). Thus, the claimed subject matter "buffering the incoming data in an input buffer" would have been optional to one skilled in the art.

#### ***Allowable Subject Matter***

8. **Claims 9-12** are allowed.

***Response to Arguments***

9. Applicant's arguments filed 11/29/04 have been fully considered but they are not persuasive.

In the REMARKS of paper filed on 11/29/04, pages 8-9, applicants have argued "Applicants has reviewed Takla and finds ... as found in claim 1". In Takla however, the clock is embedded in the data stream for transmission. The frequency of the embedded clock must be inherently determined, calculated or estimated (i.e. by the designer). Therefore, when the embedded clock is "captured" by the receiving end, inherently, the "embedded estimated frequency" would be "captured".

On page 9, applicants have argued "The examiner has not indicated what aspects ... claim 21". Figure 2 of Takla is an improvement of the prior art of Figure 1 where the PLL of Figure 2 provides a more accurate recovered clock for use in recovering the received data (i.e. see Figure 1).

In regarding claim 15, Figure 1 of Van clearly disclosed all the claimed subject matter in claim 15 including transmit end, receive end and the data path therebetween for transmitting data at known rate and recovering such data therefrom.

Page 11, regarding claim 19, the concept here in Takla is to transmit data with and embedded clock therein and to recover such data and clock correctly. The method would have been applicable for any communication system, which required such operation. Different systems could have required different data formats, thus, interfacing such data formats in order to utilize the method of Takla would have been

Art Unit: 2634

obvious to one skilled in the art depending on individual situation. Similar analogy could also be applied to other claims.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-272-3040. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2634

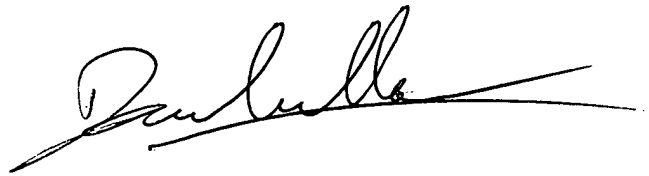
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dac V. Ha', with a long horizontal flourish extending to the right.

Dac V. Ha  
Primary Examiner  
Art Unit 2634